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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,123	09/30/2003	Brent Dalmas Nelson	EDSC106US0	4963

34279 7590 02/09/2006

DOCKET CLERK, DM/EDS
P.O. DRAWER 800889
DALLAS, TX 75380

EXAMINER

HILLERY, NATHAN

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/675,123	Applicant(s) NELSON, BRENT DALMAS	
	Examiner Nathan Hillery	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Application filed on 9/30/03.
2. Claims 1 – 19 are pending in the case. Claims 1, 10 and 18 are independent. A search and preliminary analysis demonstrate that the claimed subject cannot be adequately searched by class or keyword among patents and typical sources of non-patent literature. Please note in response, a Requirement for Information under 37 C.F.R. 1.105 is attached.

Requirement for Information - 37 C.F.R. § 1.105

3. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
 - a. Based on Applicant's disclosure of prior art on page 4, lines 1 – 31 in the specification, the claimed invention appears to be an improvement over the prior art – a metamodel system that implements a metamodel capture tool.
 - b. Based on Applicant's disclosure of Applicant's invention on page 28, lines 15 – 23 in the specification, the claimed invention appears to be based on what is called the SDG standard, specifically that the Symbol XML spreadsheet.
4. In response to this requirement, please provide a list of keywords that are particularly helpful in locating publications related to the disclosed art of symbol type mark-up language spreadsheets and/or symbol type xml files.
5. In response to this requirement, please provide the title, citation and copy of each publication that is a source used for the description of the prior art in the disclosure. For

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each publication, please provide a concise explanation of that publication's contribution to the description of the prior art.

6. In response to this requirement, please provide the title, citation and copy of each publication that any of the applicants relied upon to draft the claimed subject matter.

For each publication, please provide a concise explanation of the reliance placed on that publication in distinguishing the claimed subject matter from the prior art.

7. In response to this requirement, please provide the names of any products or services that have incorporated the claimed subject matter.

8. In response to this requirement, please provide the names of any products or services that have incorporated the disclosed prior art of metamodel requirements capture tool.

9. In response to this requirement, please state the specific improvements of the subject matter in claims 1 – 19 over the disclosed prior art and indicate the specific elements in the claimed subject matter that provide those improvements. For those claims expressed as means or steps plus function, please provide the specific page and line numbers within the disclosure which describe the claimed structure and acts.

10. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

11. The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

12. This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 10 – 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 10 – 19 recite computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the

computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

15. Further, to expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Objections

16. Claims 8 and 17 are objected to because of the following informalities: neither claim contains one sentence that ends with a period. Appropriate correction is required.

Claim Rejections - 35 USC § 112

17. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

18. Claims 1 – 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the terms "symbol type spreadsheet" and "symbol type mark-up language file", which appear to be used interchangeably throughout the claims, have

very little if any support in the specification. The only sentence in the detailed description that mentions these terms is *Metamodel generator process 146 opens metamodel specifications spreadsheets 152, runs a predetermined and herein described set of spreadsheet macro-programs to automatically batch generate all needed object type, relationship type, and symbol type XML files for the operation of processes within metamodel system 150* (part of paragraph block 0062). Based on this disclosure, it is the Office's contention that one of ordinary skill in the art at the time of the invention would not have been enabled to make and/or use this invention.

19. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20. Claims 1 – 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

21. Claim 1 recites the limitation "said specified object mark-up language spreadsheet file" in lines 17 & 18. There is insufficient antecedent basis for this limitation in the claim. Consequently, all subsequent recitations of "said specified object mark-up language spreadsheet file" are also rejected.

22. Claim 1 recites the limitation "symbol XML spreadsheet" in line 19. There is insufficient antecedent basis for this limitation in the claim. Consequently, all subsequent recitations of "symbol XML spreadsheet" are also rejected.

23. **Regarding claims 1, 10, and 18**, the metes and bounds of the terms "object type", "relationship type", and "symbol type" are unclear. Consequently, all subsequent

recitations of these terms are also rejected. Further, these terms have been loosely interpreted in so far as can be understood in light of the specification for the rejection(s) under 35 USC 103(a).

24. **Regarding dependent claims 2 – 9, 11 – 17 and 19**, the claims are rejected for fully incorporating all the deficiencies of the base claim(s) from which they depend.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claims 1 – 4, 6 – 13, and 15 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant admitted prior art) and in further view of Delcambre et al. (US 20020059566 A1).

27. **Regarding independent claim 10**, AAPA teaches that *One tool known as the metamodel requirements capture tool provides the ability to abstractly visualize and demonstrate the features associated with the use of the different classes and objections. From the metamodel requirements capture tool, it is possible to generate one or more spreadsheets that demonstrate in a tabular format, the different software language, the different XML software language, that is necessary to be changed in modifying the underlying metamodel. The benefit of the spreadsheet is the ability to review the language that is implied in modifying the metamodel to ensure consistency of terminology, consistency within relationships and the difference between the object and*

the target. This also provides the ability to make sure that the problem with the spreadsheet (p 4, lines 1 – 15), compare with capturing from said metamodel system a set of metamodel requirements; saving said captured set of metamodel requirements in at least one requirements spreadsheet. AAPA also teaches that The problem with the spreadsheet, however, is an inability to quickly move between the spreadsheet and the visual display that the metamodel provides. There is, therefore, the need to take the requirements that exist in the demonstrative spreadsheet and create from the spreadsheet the metamodel files. This permits the creation of classes and the relationship types that are used from the metamodel file in the actual metamodel itself (p 4, lines 16 – 23), compare with opening said at least one requirements spreadsheet for making accessible said captured set of metamodel requirements. AAPA also teaches that Thus, in making this transition from the spreadsheet to the metamodel files, well over two hundred relationships arise. As a result, keeping even these relationships that are visible, straight, and consistent becomes a challenging task. Accordingly, there is the need to better manage the translation between the spreadsheets that arise from the metamodel requirements capture process and translating those into metamodel files for use in the metamodel system (p 4, lines 24 – 31), compare with generating at least one each of an object type mark-up language spreadsheet, a relationship type mark-up language spreadsheet, and a symbol type mark-up language by applying a predetermined set of macros to said at least one requirements spreadsheet; generating from said specified object type mark-up language spreadsheet, relationship type mark-up language spreadsheet, and

symbol type mark-up language a plurality of metamodel mark-up language files.

AAPA does not explicitly say, "symbol type". However, Delcambre et al. illustrate in Table 6 and teach that *Table 6 lists basic definitions used to specify mappings. In the uni-level description, quotes denote constants and upper-case letters denote variables. For example, when $\tau(\text{'creator'}, X, Y)$ appears in a mapping rule, it matches all triples where a resource and a value are related through the property "creator," since X and Y are variables. The predicate S, defined in Table 6, is true if its τ -predicate is in a set of triples named L. For example, $S(\text{'xml'}, \tau(\text{'instanceOf'}, \text{'Element'}, \text{'Construct'}))$ would be true if there were an "Element" construct defined in a set of triples denoted "xml."* Typically, L will represent either the source or target triples (paragraph block 0064), compare with "symbol type". It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of AAPA with that of Delcambre et al. because such a combination would provide the users of AAPA with the benefit of a *single, uniform description for structured computer information. The uni-level description explicitly includes a description of the model or representation scheme of the information, a description of all levels of schema information (if present), and all of the data or instance information. The uni-level description includes all levels of information in a single description, at a single level* (paragraph block 0011).

28. **Regarding dependent claim 11**, AAPA teaches that *The benefit of the spreadsheet is the ability to review the language that is implied in modifying the metamodel to ensure consistency of terminology, consistency within relationships and the difference between the object and the target* (p 4, lines 10 – 15), compare with

presenting said generated metamodel mark-up language files in real-time for dynamically reviewing and revising at least one of said object type mark-up language spreadsheet, said relationship type mark-up language spreadsheet and said symbol type mark-up language spreadsheet.

29. Regarding dependent claim 12, AAPA does not explicitly teach **opening said at least one requirements spreadsheet in a batch process**. Delcambre et al. teach that *FIG. 6 is a flow diagram illustrating a process involving a mapping or transformation process 80 in which source data 82 of an originating representation scheme is transformed or mapped into target data 84 of a different representation scheme. This structural mapping process 80 is one approach that allows information to be transformed and delivered to tools that use (potentially) different models, schema, or data, thereby allowing tools adapted for one representation scheme to be used with data originally of another representation scheme. Note that the process shown in FIG. 6 can be performed in a number of ways, such as in a batch process where all source data is extracted, transformed, and injected in one step, or alternatively, in an incremental process where source data is extracted, transformed, and injected as it becomes available* (paragraph block 0060), compare with **opening said at least one requirements spreadsheet in a batch process**. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of AAPA with that of Delcambre et al. because such a combination would provide the users of AAPA with the benefit of *a single, uniform description for structured computer information. The uni-level description explicitly includes a description of the model or*

representation scheme of the information, a description of all levels of schema information (if present), and all of the data or instance information. The uni-level description includes all levels of information in a single description, at a single level (paragraph block 0011).

30. **Regarding dependent claim 13**, AAPA does not explicitly teach **presenting, in said at least one each of an object type mark-up language spreadsheet a tabular form of a selected set of metamodel components**. Delcambre et al. teach that *Users interact with the SLIMPad scratchpad application by selecting content from any of a number of information sources including XML documents, graphical presentation slides (e.g., Microsoft PowerPoint), spreadsheet files (e.g., Microsoft Excel), and PDF files, and dragging the content into the scratch pad. A scrap is created for the content. The scrap contains a mark with a reference back to the content. Scraps can be organized into bundles, which can be nested. By selecting a scrap, the content referenced by the corresponding mark within the scrap is displayed and highlighted at the information source* (paragraph block 0074), compare with **presenting, in said at least one each of an object type mark-up language spreadsheet a tabular form of a selected set of metamodel components**. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of AAPA with that of Delcambre et al. because such a combination would provide the users of AAPA with the benefit of a *single, uniform description for structured computer information. The uni-level description explicitly includes a description of the model or representation scheme of the information, a description of all levels of schema information (if present), and all of the*

data or instance information. The uni-level description includes all levels of information in a single description, at a single level (paragraph block 0011).

31. **Regarding dependent claim 15**, neither AAPA nor Delcambre et al. explicitly teach **generating said at least one each of an object type file, a relationship type file, and a symbol XML file from said at least one requirements spreadsheet using a plurality of Visual Basic generation instructions**. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to **use Visual Basic to generate said at least one each of an object type file, a relationship type file, and a symbol XML file from said at least one requirements spreadsheet**, since the Free On-line Dictionary of Computing defines *Visual Basic for Applications* <programming> as (VBA) *Microsoft's common language for manipulating components of its Microsoft Office suite. It is used as the macro language for these applications and is the primary means of customising and extending them. A VBA program operates on objects representing the application and the entities it manipulates, e.g. a spreadsheet or a range of cells in Microsoft Excel* (<<http://foldoc.org/?VBA>>). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of AAPA with that of Delcambre et al. because such a combination would provide the users of AAPA with the benefit of a *single, uniform description for structured computer information. The uni-level description explicitly includes a description of the model or representation scheme of the information, a description of all levels of schema information (if present), and all of the*

data or instance information. The uni-level description includes all levels of information in a single description, at a single level (paragraph block 0011).

32. **Regarding dependent claim 16**, AAPA does not explicitly teach **generating a graphical representation of said capturing instructions**. Delcambre et al. teach that *Table 3 shows an excerpt of the uni-level description for the simplified XML data model of Table 1. As an alternative to the triple-based uni-level description, FIG. 5 illustrates a corresponding visual Unified Modeling Language (UML) representation 78 of the same (simplified) XML representation scheme. UML defines a graphical notation for representing class diagrams. UML has been promulgated by the Object Management Group, a consortium that produces and maintains computer industry specifications (paragraph block 0055), compare with generating a graphical representation of said capturing instructions*. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of AAPA with that of Delcambre et al. because such a combination would provide the users of AAPA with the benefit of a *single, uniform description for structured computer information. The uni-level description explicitly includes a description of the model or representation scheme of the information, a description of all levels of schema information (if present), and all of the data or instance information. The uni-level description includes all levels of information in a single description, at a single level (paragraph block 0011).*

33. **Regarding dependent claim 17**, AAPA does not explicitly teach **generating a graphical representation of generating at least one each of an object type mark-up language spreadsheet, a relationship type mark-up language spreadsheet, and**

a symbol mark-up language spreadsheet by applying a predetermined set of macros to said at least one requirements spreadsheet. Delcambre et al. teach that *The Topic Map representation scheme 134 is a simplified version of the ISO standard allowing only a single level of schema and instance definition. FIG. 9 illustrates the simplified Topic Map representation scheme 134 using the UML visual representation where Topic Type, TopicRelType, and AnchorType represent the schema constructs. TopicInstance, TopicRelInst, and AnchorInst represent the instance constructs* (paragraph block 0073), compare with **generating a graphical representation of generating at least one each of an object type mark-up language spreadsheet, a relationship type mark-up language spreadsheet, and a symbol mark-up language spreadsheet by applying a predetermined set of macros to said at least one requirements spreadsheet.** It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of AAPA with that of Delcambre et al. because such a combination would provide the users of AAPA with the benefit of a *single, uniform description for structured computer information. The uni-level description explicitly includes a description of the model or representation scheme of the information, a description of all levels of schema information (if present), and all of the data or instance information. The uni-level description includes all levels of information in a single description, at a single level* (paragraph block 0011).

34. **Regarding claims 1 – 4, 6 – 9 and 18,** the claims incorporate substantially similar subject matter as claims 10 – 13 and 15 – 17 and are rejected along the same rationale.

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35. **Regarding dependent claim 19, AAPA does not explicitly teach said storage medium comprises a plurality of individual associated storage device media.**

Delcambre et al. teach that *The memory system 26 generally includes high-speed main memory 40 in the form of a medium such as random access memory (RAM) and read only memory (ROM) semiconductor devices, and secondary storage 42 in the form of long term storage mediums such as floppy disks, hard disks, tape, CD-ROM, flash memory, etc. and other devices that store data using electrical, magnetic, optical or other recording media. The main memory 40 also can include video display memory for displaying images through a display device. Those skilled in the art will recognize that the memory 26 can comprise a variety of alternative components having a variety of storage capacities* (block paragraph 0031), compare with **said storage medium comprises a plurality of individual associated storage device media**. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosure of AAPA with that of Delcambre et al. because such a combination would provide the users of AAPA with the benefit of a *single, uniform description for structured computer information. The uni-level description explicitly includes a description of the model or representation scheme of the information, a description of all levels of schema information (if present), and all of the data or instance information. The uni-level description includes all levels of information in a single description, at a single level* (paragraph block 0011).

36. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Delcambre et al. (US 20020059566 A1) as applied to claims 1 and 10 above, and further in view of Jamshidi et al. (US 20040181748 A1).

37. **Regarding dependent claims 5 and 14**, neither AAPA nor Delcambre et al. explicitly teach **generating said at least one object type mark-up language spreadsheet, a relationship type mark-up language spreadsheet, and a symbol type mark-up language spreadsheet from said at least one requirements spreadsheet using a plurality of embedded spreadsheet formulas**. Jamshidi et al. teach that *The HTML Compiler class 204 receives as input the HTML document 103 generated from the spreadsheet application 102. It produces an XML document 106 with embedded pseudo code (p-code) instructions, also containing an XSLT Style Sheet for the Interpreter 108, and an XML document describing the initial data that needs to be displayed on the spreadsheet the first time its is presented to the Browser 114, and finally an XML document describing the graphical charts that need to be dynamically recreated each time a new HTML with new sets of data are generated. Furthermore, the HTML Compiler 204 also creates an XML document defining the formulas contained in the underlying application. This is necessary for spreadsheet-type applications which have embedded formulas* (paragraph block 0063), compare with **generating said at least one object type mark-up language spreadsheet, a relationship type mark-up language spreadsheet, and a symbol type mark-up language spreadsheet from said at least one requirements spreadsheet using a plurality of embedded spreadsheet formulas**. It would have been obvious to one of ordinary skill in the art at

the time of the invention to combine the disclosure of AAPA and Delcambre et al. with that of Jamshidi et al. because such a combination would provide the users of AAPA and Delcambre et al. with the benefit of *An information handling system comprising an input for receiving a spreadsheet application in static hypertext form* (paragraph block 0018).

Conclusion

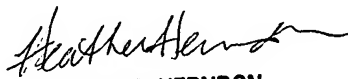
38. This Office action has an attached requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NH


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